CAPITATE LENGTHENING OSTEOTOMY IN THE TREATMENT OF KIENBÖCK'S DISEASE

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ABSTRACT

Fragmentation and collapse of the carpal lunate in stage III Kienböck's disease is a challenge to both patients and surgeons. Capitate lengthening with a limited fusion as a modification of the procedure described by Grauer, O. et al(1) in 1966, was performed to twenty patients with stage III Kienböck's disease and followed from ten months to twenty-four months after the operation. The motion of the wrist has not been improved in all patients, but pain was generally relieved in all except one patient suffered from severe pain. In comparison to the normal wrist, the grip strength was satisfactory in fifteen patients and was fair in five patients. Three patients developed radiocarpal arthrosis, two patients had non-union and one patient suffered from Sudeck's atrophy. Based on the satisfactory clinical and radiologic results found in this study, we recommend capitate lengthening in stage III of Kienböck's disease.

INTRODUCTION

The exact etiology of avascular necrosis of the carpal lunate or lunato-malacia, first described by Kienböck in 1910, remains unclear.(2) The Kienböck's disease was considered to be one of the most common causes of wrist pain in active young adult population.(3) In the early stages, spontaneous recovery of the disease may occur, generally before the onset of the irreversibility of necrosis and collapse.(4) Various operative and non-operative methods ranging from simple immobilization to, such operation as, joint levelling, intercarpal fusion, arthroplasty, vascularized bone grafts and wrist arthrodesis had been advocated as treatment of Kienböck's disease. (4)